Executive Strategy Presentation: Retail Chain Transformation

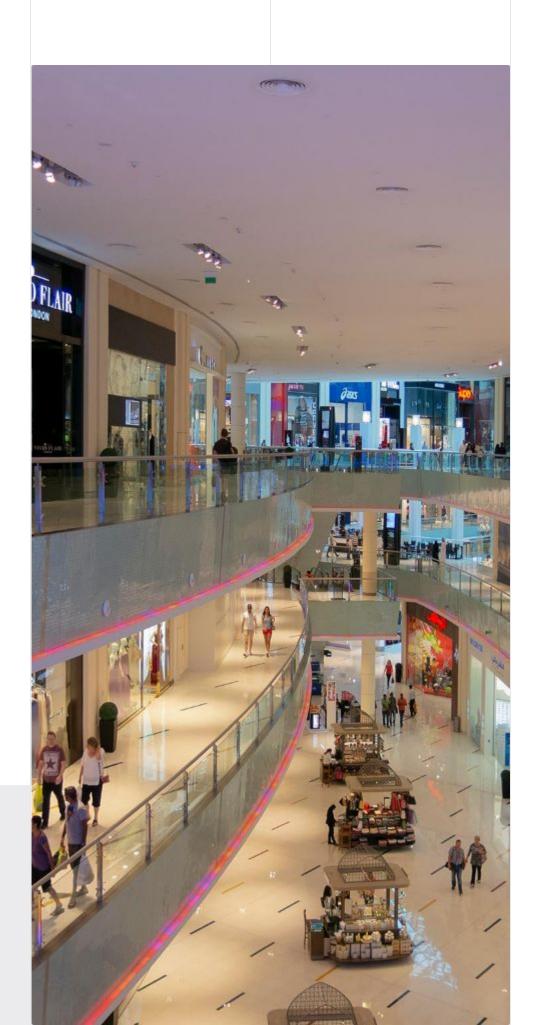
Team DN5

Christopher Fischer

Eric Molner

Justin Rizzo

Sharon White



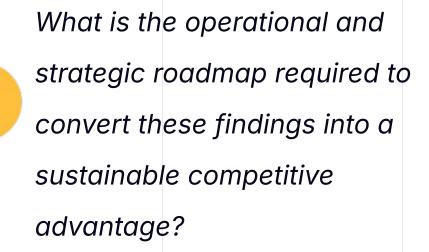
Client Situation: Legacy Retail Chain Challenges

Steady erosion of market share and declining customer loyalty amid increased online competition

Where are the critical, hidden vulnerabilities in our current operations that are draining our profitability?

What is our data-driven strategy to transform our business and win in this new retail landscape?

How can we better understand our customers to win their loyalty in a way digital competitors cannot?



Data-Driven Framework for Strategic Insights

DISCOVER

We started with a massive, raw dataset in BigQuery. Using Google Colab, we conducted initial data profiling to understand its structure, identify quality issues, and surface the most significant high-level patterns, like the strong weekly sales cycles.

INVESTIGATE

We formed hypotheses based on our initial discoveries and used advanced analytics in Tableau and pandas to dig deeper. This involved creating custom calculations like the "Localization Index" to understand the root causes behind the patterns we saw.

VALIDATE

We actively looked for contradictory evidence, using techniques like sales volatility analysis to test our assumption that "all stores are the same." We used Gemini as a "devil's advocate" to identify potential blind spots.

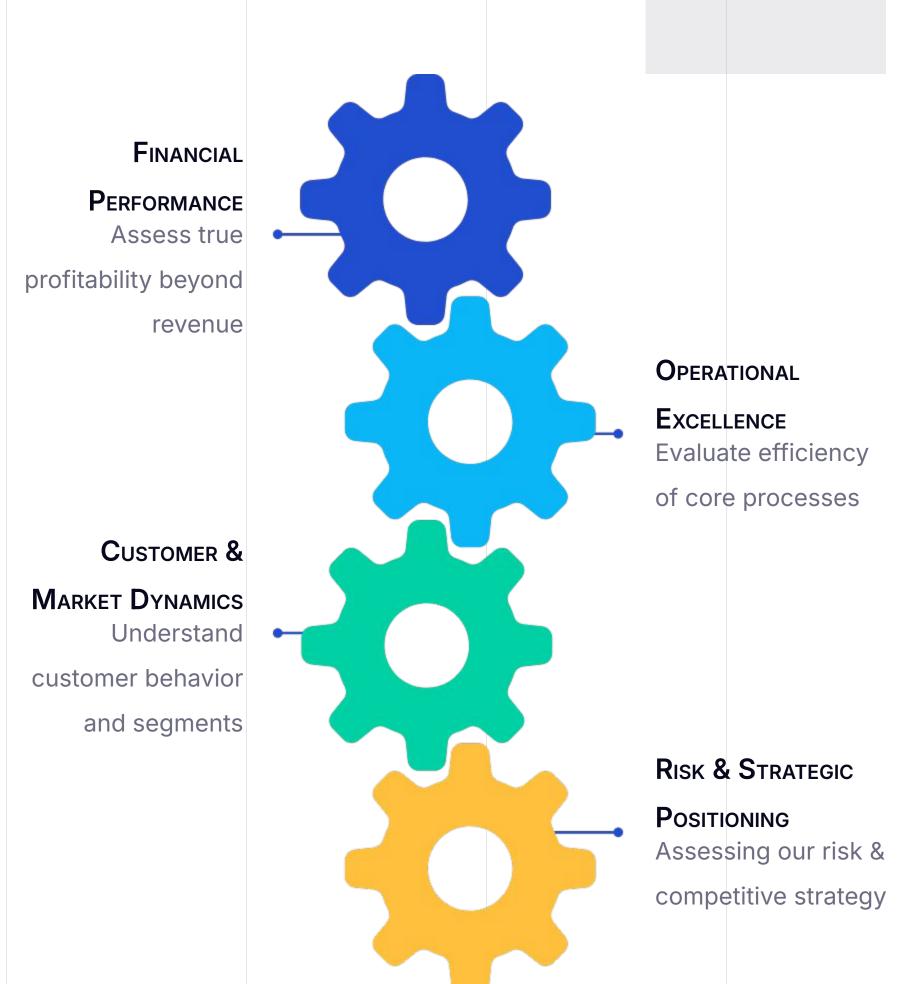
EXTEND

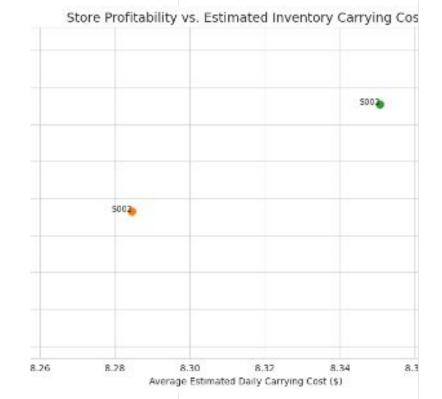
With validated insights, we used Gemini as a strategic partner to brainstorm actionable recommendations. We then quantified the business impact of these recommendations by estimating the ROI and building a 90-day implementation roadmap.

E

Four-Pronged Approach to Business Transformation

Mission: Analyze critical pillars to reverse declining market share





FINANCIAL
PERFORMANCE:
Multi-Million
Dollar Inventory
Crisis



The company is holding an average of 734 days of inventory, causing massive trapped capital.

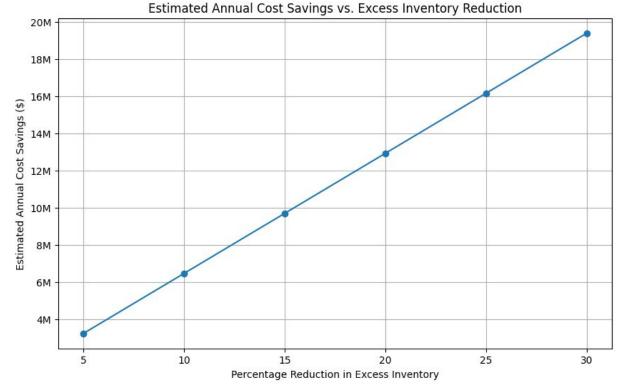
This results in significant carrying costs impacting financial performance.

The root issue is a systemic failure in inventory management, not just slow sales.

This inefficiency costs approximately \$250 monthly per product line on shelves.

The financial losses indicate a deeper operational problem within the company.

Addressing the operational inefficiencies is critical to resolving the financial burden.



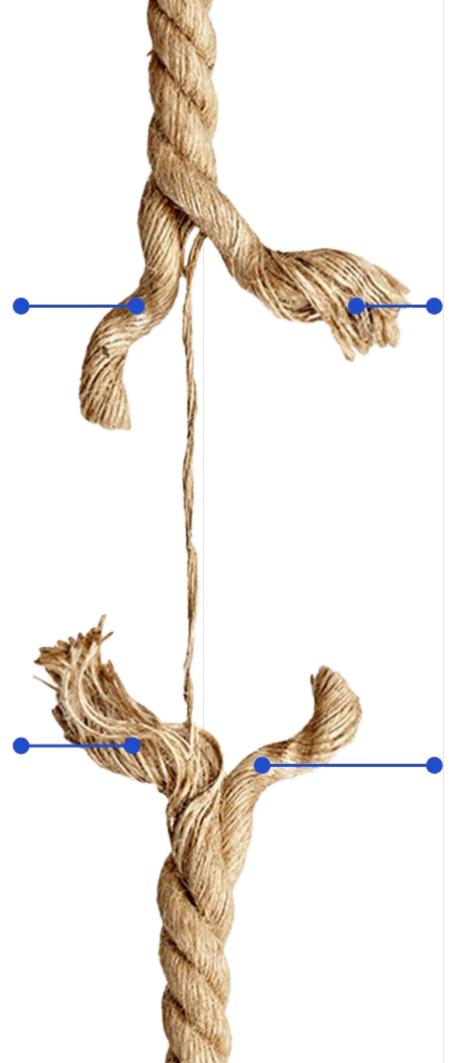
OPERATIONAL EXCELLENCE: The Illusion of an Accurate Forecast

Our internal demand forecast shows a 99.7% correlation with sales but is misleading.

Despite the high correlation, inventory levels remain highly volatile and inefficient.

"Good" forecasts are causing poor inventory alignment and millions in lost potential savings.

The paradox of a seemingly accurate forecast resulting in costly operational inefficiencies.



The forecast predicts the general sales rhythm but fails to capture predictable variations.

This shortcoming leads to operational chaos despite appearing to be a good forecast.

The financial crisis stems from an operational process that looks good on paper but is broken in reality.

A disconnect between operational metrics and actual performance triggers the crisis.

CUSTOMER & MARKETING: Transforming How We Target, Engage, and Grow

Our current one-size-fits-all discount strategy is incredibly inefficient. We are wasting marketing dollars on broad promotions that don't drive sales for most of our customer base, while failing to reward our most valuable segment effectively.

The operational chaos is preventing us from implementing the targeted, segment-based strategy we need to grow.

High-Value Generalists

- 1. Respond well to promotions
- Most valuable customer segment
- 3. Not effectively rewarded under current strategy

Budget Buyers

- 1. Do not respond well to promotions
- Part of the three distinct customer segments
- 3. Marketing dollars wasted on broad promotions



The Illusion of Control – Uncovering Hidden Risk

Surface-Level Findings

Our analysis showed that all stores have a nearly identical product mix and customer base. This indicates a one-size-fit-all strategy in use.



REALITY: OPERATIONAL RISK PROFILES ARE WILDLY

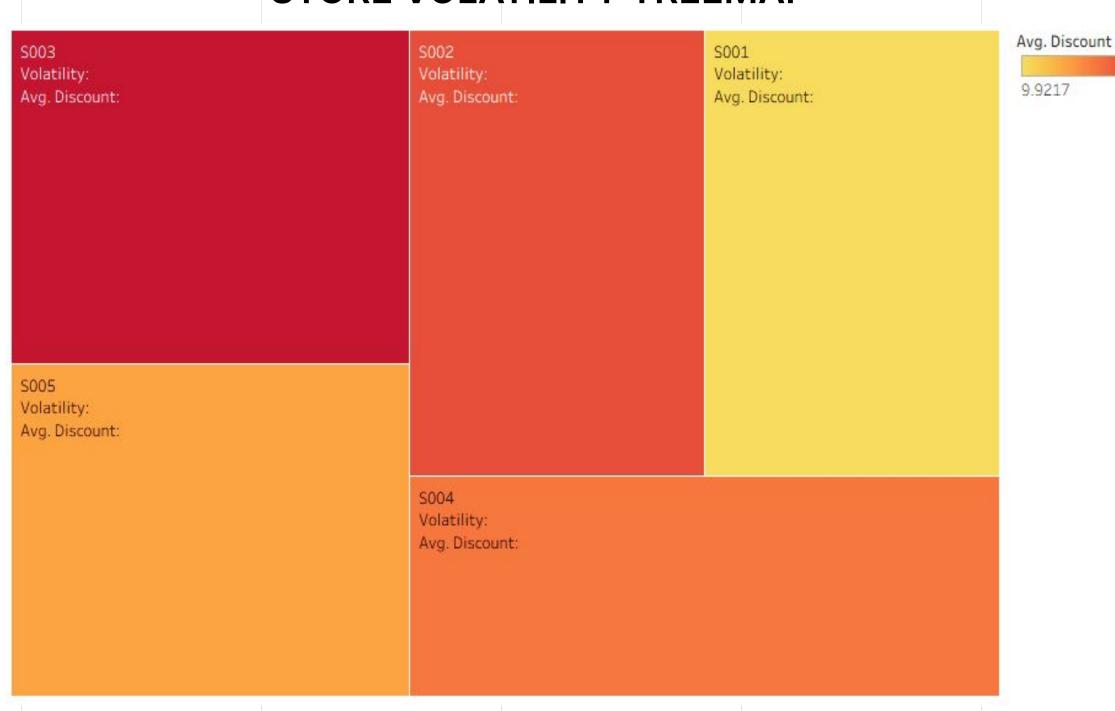
DIFFERENT

This treemap reveals the hidden risk. Our most volatile stores (largest rectangles) are also the ones most reliant on discounts (darkest color), indicating weak customer loyalty and making a uniform strategy dangerously inefficient.

STORE VOLATILITY TREEMAP

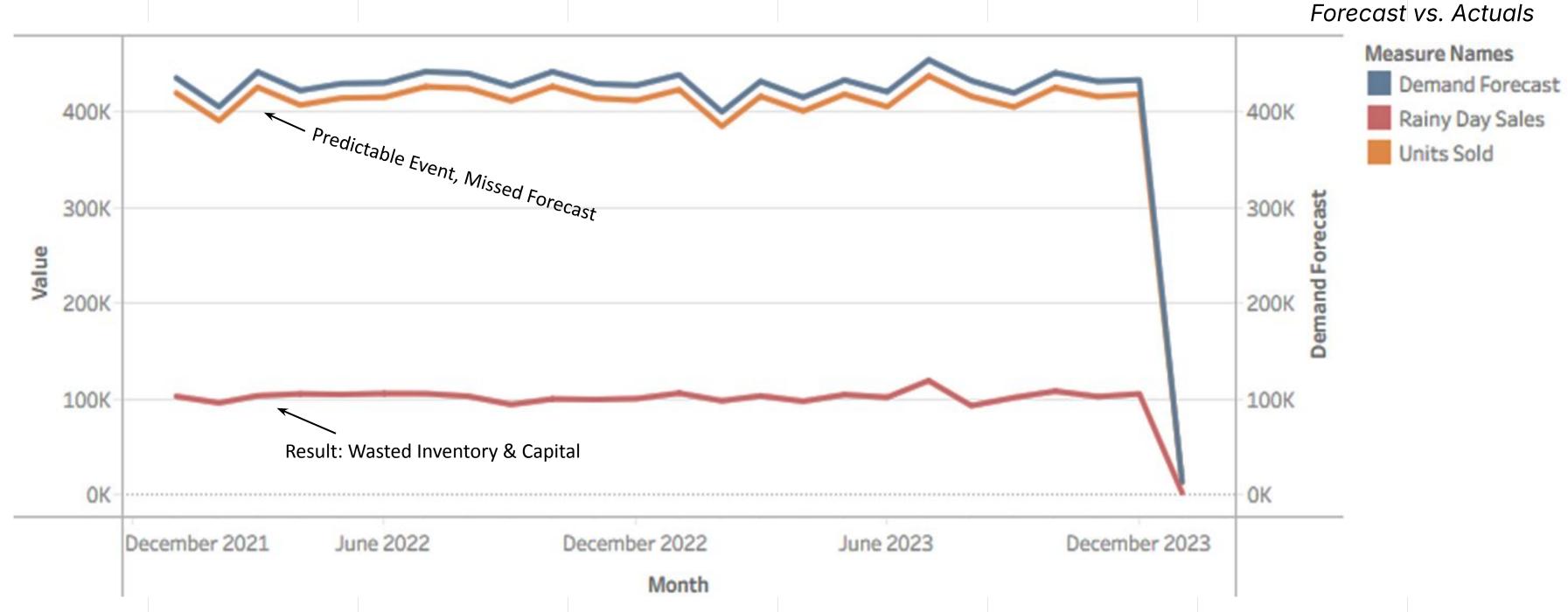
9.9217

10.1053



The Root Cause – Operational Self-Sabotage

Our Internal Forecast is the Root Cause of the Chaos

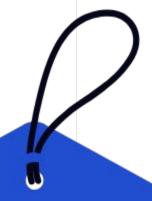


Our investigation proves the internal demand forecast is systematically flawed. It ignores predictable variables like weather, creating a recurring and costly cycle of stockouts and waste.

The operational chaos and financial drain are not caused by the market; they are a direct result of our own broken planning process. This is not a market problem to be managed; it is an operational problem to be solved.

Business Transformation Strategy & ROI

Immediate actions to improve forecasting, inventory, and marketing effectiveness



Overhaul the forecasting system with external variable integration

Replace the current model immediately by including weather, holidays, and local events to improve accuracy and reduce forecast errors by 25% within six months.



2
Launch aggressive inventory reduction initiative

Liquidate excess inventory and apply a data-driven ordering process based on improved forecasts to reduce inventory by even 10%, saves \$6.4 million annually.



Implement segment-based marketing strategy

Stop chain-wide promotions and shift budget to a loyalty program targeting high-value customers, aiming to increase their average transaction value by 15%.



Measure success with clear KPI's

Use forecast error reduction, inventory cost savings, and transaction value growth as metrics to track the effectiveness of each strategic action.

90-Day Implementation Roadmap

Clear phased timeline for forecast, inventory, and marketing actions



IMMEDIATE STRATEGIC ACTIONS

These are the urgent steps to halt financial losses and drive change



Strategic
Choice Is Clear

Approve the 90-day plan to develop and pilot the new forecasting model immediately.



Approve Inventory Reduction Cultural
resistance to
change is the
biggest
obstacle to
implementing
new
processes.



Mitigation
Through
Communicatio
n

The focus is on how quickly we act to stop the multi-million dollar drain internally.



Authorize
Forecasting
Task Force

Empower
teams to clear
overstocked
items and free
up capital
without delay.



Primary Risk Identified

Leadership
must
communicate
consistently to
emphasize
financial
urgency and
drive change.